

## REMARKS

Reconsideration in view of the foregoing amendments and following remarks is respectfully requested.

This is in response to the final Office action mailed October 24, 2007. Presently, claims 1-45 are pending, and claims 19-45 withdrawn from consideration. Claims 1-18 stand rejected.

### Rejections under 35 U.S.C. 102

In the final Office action, claims 1, 9, 12-14 and 16 were again rejected as anticipated by Douk et al. (Pub. No. US 2002/0151927 A1). With respect to claim 1, the Examiner again points out component 25 of **FIG. 5** which Douk termed "an expandable tubular filter" noting the initial line of paragraph [0051]. The Examiner continues to explain that the sheathless filter disclosed by Douk is radially expandable in response to displacement of the control cable relative to the tubular guidewire such that the sheathless filter presents at least a convex primary filter surface to a flow of blood within a blood vessel when introduced thereinto and expanded. It is again respectfully submitted, however, that Douk does not describe nor show that such filter presents "at least a convex primary filter surface to a flow of blood." Douk show filter 25 with a tubular midsection and conical or frustoconical shaped end (noting **FIG. 5**). Paragraphs [0017] and [0018] clearly fail to teach the shape of the surface presented to a flow of blood. Conical or frustoconical surfaces are not convex surface. In particular, conical or frustoconical surfaces such as that of Douk in **FIG. 5** are not rounded as one progresses axially, but rather only expand linearly as one progresses axially. As explained by the Merriam-Webster Online dictionary, the term convex means "curved or rounded outward like the exterior of a sphere or circle." In the Examiner's Response to Arguments, the Examiner indicated that the convex surface recitation is functional, that Douk included a convex surface which might be presented to a flow of blood, and that Douk's filter shape is also convex because it "bulges outward." It is respectfully again submitted that the claim language recites a very specific term "convex" not "bulges

outward" and that the relevant surface depicted in **FIG. 5** of Douk is conical or frustoconical. Reconsideration and allowance of claim 1 and claims depending therefrom is respectfully requested.

With respect to claim 9, the Examiner again points out **FIG. 5** of Douk in identifying disclosure purported to be anticipatory. The Examiner asserts, with respect to **FIG. 5**, that any two intersecting wires show a tubular braided wire framework and that remaining wires are filter mesh. It is respectfully submitted that a framework and a filter mesh are distinct sub-elements. Further, it is respectfully submitted were Douk's disclosure to be anticipatory, then Douk's filter should assume the same shape as the present invention. Yet, Douk forms a conical or frustoconical shaped surface and the present invention forms a convex surface when radially expanded. Further, as noted previously, Douk, in **FIG. 5**, shows a conical or frustoconical surface including an inlet 66 believed to be presented to a blood flow. It is respectfully submitted that the passages of paragraphs [0017] and [0018] and drawing of **FIG. 5** pointed out by the Examiner are clearly not anticipatory. Reconsideration and allowance of claim 9 is respectfully requested.

With respect to claim 12, paragraph [0051] of Douk was again pointed out for disclosing incorporating radiopaque marker bands in adhesive joints securing the filter of **FIG. 5**. However, as noted previously, **FIG. 5** and paragraphs [0017], [0018] and [0051] of Douk do not anticipate a convex primary filter surface. Nor would one of ordinary skill, in possession of such disclosure, have been lead to substitute a convex primary filter surface for the conical or frustoconical surface portion of Douk. Reconsideration and allowance of claim 12 is respectfully requested.

With respect to claim 13, the Examiner again points out **FIG. 5** of Douk as also disclosing a distal interior face presenting a concave secondary filter surface to a flow of blood. It is respectfully submitted that **FIG. 5** appears to disclose another distally positioned conical or frustoconical surface and not a distal concave surface. Further, as noted earlier, **FIG. 5** and paragraphs [0017], [0018] and [0051] of Douk do not anticipate a convex

primary filter surface presented to a flow of blood. Reconsideration and allowance of claim 13 is respectfully requested.

With respect to claim 14, as noted previously, **FIG. 5** and paragraphs [0017], [0018] and [0051] of Douk do not anticipate a convex primary filter surface presented to a flow of blood. Reconsideration and allowance of claim 14 is respectfully requested.

With respect to claim 16, Douk appears to disclose or teach only a filter which is expandable or collapsible. Selectivity of plural deployed states does not appear to be taught or disclosed in Douk. Douk does teach, in another embodiment discussed in paragraph [0019], an arrangement in which a first degree of force collapses a self-expanding filter and a second degree of force disengages a rod and allows the rod to be withdrawn from a patient. Such a teaching would appear opposite to selectively deployable states as being claimed in claim 16. Moreover, as noted previously, **FIG. 5** and paragraphs [0017], [0018] and [0051] of Douk do not anticipate a convex primary filter surface presented to a flow of blood. With respect to the Examiner's comments in Response to Arguments, it is respectfully submitted that since the present filter and the Douk prior art filter are clearly distinct when deployed, since the present invention has a convex surface and the Douk prior art device has a conical or frustoconical surface, the Examiner's assumption that there are selectively deployable states in the Douk device does not seem to be supported by the Douk disclosure. Moreover, the lack of a convex surface in Douk demonstrates that the present invention is distinct from Douk. Reconsideration and allowance of claim 16, as well as claims 1, 9 and 12-14, is respectfully requested.

### **Rejections under 35 U.S.C. 103**

In the final Office action, claims 2-5 and 15 were rejected as obvious over Douk. As noted earlier, **FIG. 5** and paragraphs [0017], [0018] and [0051] do not teach nor suggest a convex primary filter surface presented to the flow of blood; rather, **FIG. 5** shows a conical or frustoconical primary filter surface. A conical or frustoconical surface shape would not lead one of ordinary skill to a convex filter surface. While Douk teaches in paragraph [0019]

a stop element in relationship to a different embodiment, it is unclear that such would lead one of ordinary skill to a convex filter surface and a different stop element. Note that the embodiment under discussion in paragraph [0019] of Douk is characterized by additional proximally directed force causing disengagement of a rod from an actuator so that the rod may be withdrawn from a patient. Moreover, Douk indicates that paragraph [0019] is referring to another embodiment than that referred to in paragraphs [0017] and [0018]. Further, the Douk teaching continues toward a teaching that appears to dismantle the mechanism. One of ordinary skill would not be lead to look to such dismantling teachings to find a means to resist displacement, but rather to allow removal of parts of the Douk mechanism. With respect to claim 15, it is respectfully submitted that the Examiner may have misunderstood or misread claim 15 because claim 15 is directed to outer diameter of the filter prior to deployment. Such diameter is believed to be substantially unrelated to whether a vessel will or will not be damaged upon subsequent deployment. Further, it is respectfully submitted that the Examiner's proposed modification of the maximum diameter of the Douk filter is also substantially unrelated to the diameter of the filter of the present invention prior to deployment. For these reasons, one of ordinary skill would not be lead to modify the maximum expansion diameter of the Douk filter to achieve a diameter prior to deployment of the filter of the present invention. Reconsideration and allowance of claims 2-5 and 15 is respectfully requested.

In the final Office action, claims 2-5 were again rejected as obvious over Douk in view of Kusleika et al. (US 6,425,815). The Examiner points out stop 40 of Kusleika to prevent over expansion of a filter. Kusleika, however, is controlling a filter body system with a proximally oriented opening 56 sufficiently sized to entrain particulate matter. It is unclear that stop 40 of Kusleika's filter body with proximate opening would be transferable to the Douk filter. Moreover, the Douk filter lacks a convex primary surface presented to the flow of blood. Reconsideration and allowance are respectfully requested.

In the final Office action, claims 2-5 were also again rejected over Douk in view of Seguin et al. (US 6,562,058). The Examiner points out a clamp device of the Seguin

**FIGS. 8A-D**, more particularly, paired axially constrained grippers 150 and paired axially movable grippers 160. The constrained grippers 150 hold the guidewire and the movable grippers hold the actuating wire. One of ordinary skill would not select such devices, shown in association with a conical or frustoconical faced filter to resist displacement of a control cable relative to a tubular guidewire in order to deal with a convex surfaced filter presenting to a blood flow. If such combination had been made, it still would lack a convex primary filter surface. Reconsideration and allowance are respectfully requested.

In the final Office action, claims 6-8, 10 and 11 were rejected as obvious over Douk in view of Greenhalgh et al. (US 6,364,895). The Examiner points out Greenhalgh teaches co-braiding metal and polymer yarn to form filter structures at column 5, lines 25-48. The Examiner then suggests that it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the Greenhalgh mesh in the Douk filter. However, such proposed substitution would not have resulted in a convex primary filter surface presented to a flow of blood; rather, the proposed substitution would result in a conical or frustoconical surface on the primary filter surface. Further, the pore sizes of between 20-1500 microns taught by Kusleika at column 4, line 59, are taught for metallic tubular braid, not for a tubular braided wire framework with a filter mesh of multifilament polymer fibers co-braided with wires of the tubular braided wire framework. Reconsideration and allowance of claims 6-8, 10 and 11 is respectfully requested.

In the final Office action, claims 17 and 18 were rejected as obvious over Douk in view of Gillick et al. (US 6,383,206). As noted earlier, Douk discloses a frustoconical or conical shape presentment to blood flow, not a convex surface. Further, Douk does not appear to disclose or teach more than an open situation and does not appear that resilient flexible members lie generally parallel to a longitudinal axis and then also does not appear to disclose or teach a plurality of selectively deployable states of expansion. Gillick was cited by the Examiner for teaching a filter with a state where blood flow is presented (column 4, lines 5-8). Gillick teaches a sheath-type filter with occlusive properties. One of ordinary skill would not have been lead to the present invention with a convex primary filter surface

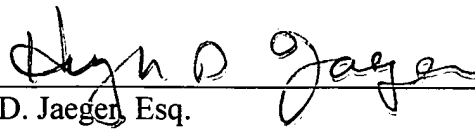
through the Examiner's proposed combination. Reconsideration and allowance are respectfully requested.

If there are any further issues yet to be resolved to advance the prosecution of this patent application to issue, the Examiner is requested to telephone the undersigned counsel.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

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A handwritten signature in cursive script, reading "Hugh D. Jaeger", is written over a horizontal line.

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